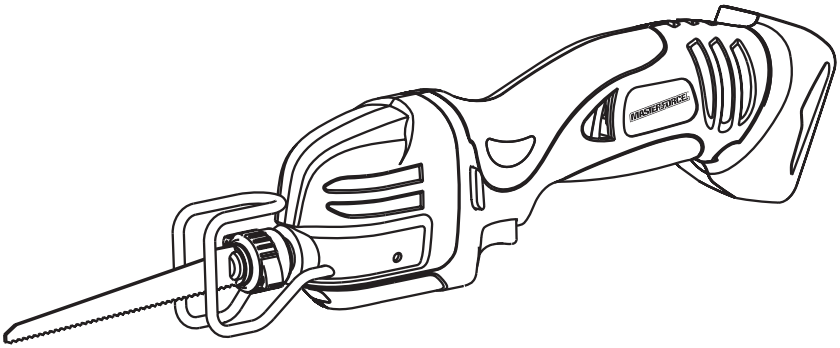
MASTER FORCE®

FLEXPOWER®

CHOOSE YOUR TOOL. CHOOSE YOUR POWER.

20 Volt Reciprocating Saw



241-0431

OPERATOR'S MANUAL

⚠ CAUTION: To Reduce The Risk Of Injury, User Must Read And Understand The Operator's Manual. Save These Instructions For Future Reference.

For questions / comments, technical assistance or repair parts – Please Call Toll Free: 1-866-917-4374. (M-F 8am – 6pm EST)

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SAFETY SYMBOLS

Some of these following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

Symbol	Name	Designation / Explanation
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
∿	Alternating current	Type of current
⎓	Direct current	Type of characteristic of current
n	No-load speed	Rotational speed at no load
⧈	Class II construction	Double insulated construction
.../min	Per minute	Revolutions, strokes, surface speed orbits, etc., per minute
	Wear safety goggles	**⚠ WARNING: The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full-face shield when needed. We recommend a Wide Vision Safety Mask for use over eye-glasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.**

⚠ WARNING: To ensure safety and reliability, all repairs should be performed by a qualified service technician.

SAFETY INSTRUCTIONS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are not substitutes for proper accident prevention measures.

⚠ WARNING: Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as "DANGER," "WARNING," and "CAUTION" before using this tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

SYMBOL MEANING

SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, OR CAUTION. May be used in conjunction with other symbols or pictographs.

⚠ DANGER: Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

⚠ WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE: (Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SAVE THESE INSTRUCTIONS!

SAFETY INSTRUCTIONS

⚠ WARNING: READ ALL SAFETY WARNINGS AND INSTRUCTIONS!

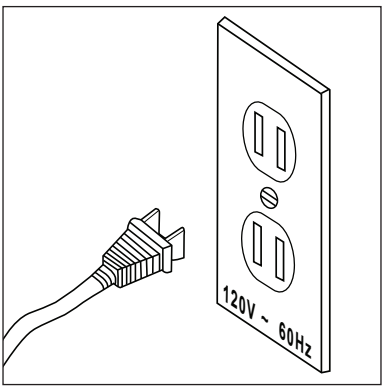
Failure to follow the warnings and instructions may result in electric shock, fire and/or serious personal injury. Save all warnings and instructions for future reference.
The "term power tool" in the warnings refers to your mains-operated (corded) power or battery-operated (cordless) power tool.

⚠ WARNING: Risk of fire and electric shock. Dry location use only. Do not expose to rain. Risk of injury.

WORK AREA SAFETY

1. Keep the work area clean and well lit. Cluttered or dark areas invite accidents.
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks, which may ignite the dust or fumes.
3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY



1. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
2. Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
4. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
5. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. If operating a power tool in a damp location is unavoidable, use a ground-fault circuit interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

PERSONAL SAFETY

1. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
2. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
3. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

4. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

5. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

6. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

7. If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used. Use of these devices can reduce dust-related hazards.

POWER TOOL USE AND CARE

1. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and more safely at the rate for which it was designed.

2. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

3. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

4. Store side power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

6. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

7. Use the power tool, accessories, tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

BATTERY TOOL USE AND CARE

1. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

2. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

3. When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails screws or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

4. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, also seek medical help. Liquid ejected from the battery may cause irritation or burns.

SERVICE

1. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

SPECIFIC SAFETY RULES FOR RECIPROCATING SAW

1. Use only with the batteries and charger listed below.

Battery pack	Charger
252-8024	252-8036 252-8037 252-8044
252-8028	
252-8029	
252-8030	
252-8031	
252-8032	
252-8033	
252-8034	

⚠ WARNING: Hold power tool by its insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

2. Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.

3. Know your power tool. Read the operator's manual carefully. Learn the applications and limitations, as well as the specific potential hazards related to this tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.

4. Protect your lungs. Wear a face or dust mask if the operation is dusty. Following this rule will reduce the risk of serious personal injury.

5. Protect your hearing. Wear hearing protection during extended periods of operation. Following this rule will reduce the risk of serious personal injury.

6. If you are not thoroughly familiar with the operation of a reciprocating saw, obtain advice from a qualified person.

7. When servicing, use only identical replacement parts.

8. Avoid cutting nails and staples when operating with the wood blade. Inspect the workpiece carefully and remove all nails and staples before operation.

9. Make sure that the blade always extends beyond the shoe and the workpiece throughout the stroke. Blades may shatter if they strike the workpiece or shoe.

10. Do not cut an oversized workpiece.

11. Check for proper clearance beyond the workpiece before cutting, so that the blade will not strike the floor, workbench, etc.

12. Make sure that the blade is not contacting the workpiece before the switch is turned on.

13. Keep the saw blades clean and sharp.

14. Use only correct blades. Always use blades recommended for the workpiece material.

15. Do not leave the tool running. Operate the tool only when hand-held.

16. Always release the switch to "OFF" and wait for the tool to come to a complete stop before removing the blade from the workpiece.

17. Keep the handle dry, clean, and free from oil and grease. Always use a clean cloth when cleaning. Do not use solvents, brake fluids, gasoline or other petroleum products to clean the tool; they may damage plastic parts.

18. Do not operate this tool in a gaseous or explosive environment or near explosive materials.

19. Never force the tool. Apply firm pressure against the saw's pivot shoe for the sawing operation; too little or too much pressure could cause jumping or vibration and may break the blade.

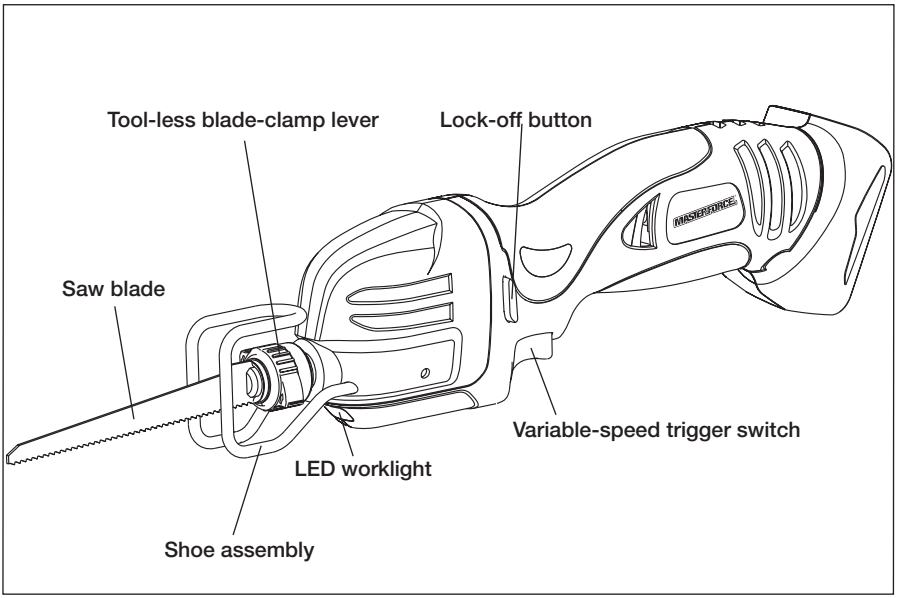
20. **Never** operate the saw without the pivot shoe in position. The spindle may strike against the workpiece and damage the reciprocating mechanism.

SAFETY INSTRUCTIONS

21. **Do not touch the blade** or the workpiece immediately after the sawing operation. They may be extremely hot and could burn your skin.

22. **Do not reach underneath** the workpiece. The proximity of the blade to your hand is hidden from your sight.

OVERVIEW



SPECIFICATIONS

Switch	Variable speed
No load Speed:	0-3500 SPM
Blade stroke	1/2” (12.7mm)
Weight (without battery)	3lbs. 1oz.

SPECIFICATIONS

TOOL-LESS BLADE CHANGE SYSTEM

The saw has a blade clamp design that does not require the use of a tool (blade wrench) when installing or removing the blade.

VARIABLE-SPEED TRIGGER SWITCH

The variable-speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

LED WORKLIGHT

LED worklight illuminates the cutting area.

ELECTRIC BRAKE

To stop the reciprocating saw, release the trigger switch and allow the tool to come to a complete stop. The electric brake quickly stops the blade action. This feature engages automatically when you release the trigger switch.

ASSEMBLY

⚠ WARNING: If any part is broken or missing, do not attempt to plug in the power cord, attach the battery, or operate the saw until the broken or missing part is replaced. Failure to do so could result in possible serious injury.

⚠ WARNING: Do not attempt to modify this saw or create accessories not recommended for use with this saw. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury.

⚠ WARNING: To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the saw when assembling parts.

UNPACKING

This product has been shipped completely assembled.

1. Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.

2. Inspect the tool carefully to make sure that no breakage or damage occurred during shipping.

3. Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.

PACKING LIST

Reciprocating saw, 2pc wood cutting blades, Operator's manual.

OPERATION

TO ATTACH BATTERY PACK (FIG.1)

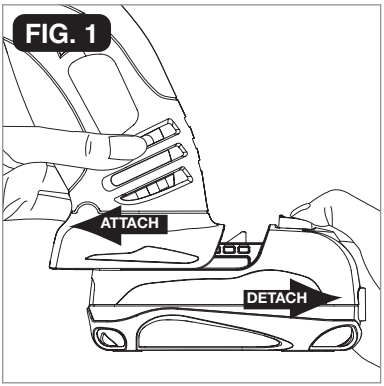
⚠ WARNING: When placing the battery pack on the tool, be sure that the raised rib on the battery pack aligns with the groove on the saw and the latches snap into place properly. Improper assembly of the battery pack can cause damage to internal components.

1. Lock the trigger switch in the "OFF" position.
2. Align the raised rib on the battery pack with the grooves on the bottom of the saw, and then attach the battery pack to the saw.

NOTICE: Make sure that the latch on the battery pack snaps into place and the battery pack is secured to the tool before beginning operation.

TO DETACH BATTERY PACK (FIG. 1)

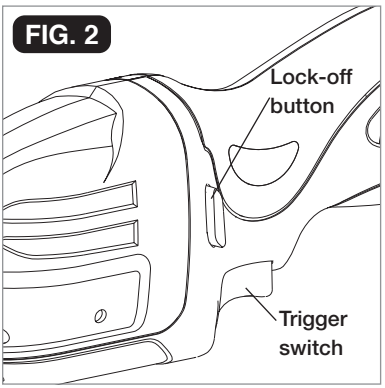
1. Lock the trigger switch in the "OFF" position.
2. Depress the battery release buttons located on the front of the battery pack to release the battery pack.
3. Pull the battery forward to remove from the tool.



VARIABLE SPEED TRIGGER SWITCH (FIG. 2)

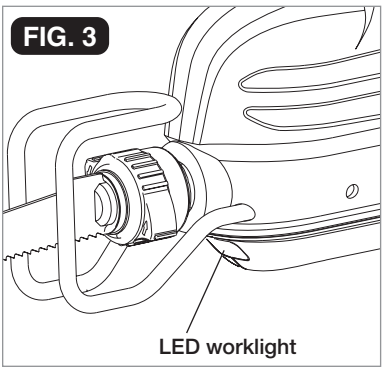
Your reciprocating saw is equipped with a trigger switch to turn the saw on and off and to control the speed.

1. To start the saw, depress the lock-off button and then squeeze trigger switch.
2. To stop the saw, release the trigger switch and allow it to return to the "OFF" position.
3. To vary the speed, simply increase or decrease the pressure on the trigger switch. The more tightly the trigger switch is squeezed, the higher the speed.



LED WORKLIGHT (FIG. 3)

Your reciprocating saw has a built-in LED worklight for illuminating the cutting area. To activate the LED worklight, squeeze the lock-off button and depress the trigger switch to start the saw.



OPERATION

BLADE SELECTION

In order to obtain the best performance from the saw, it is important to select the correct blade for the particular application and type of material to be cut.
Blades with fewer teeth, such as those with 10 teeth per inch (TPI), are typically used for cutting wood, while blades with more teeth are better for cutting metal or plastic. We recommend 14 TPI for plastics and soft metals and 18 TPI for hard metals.

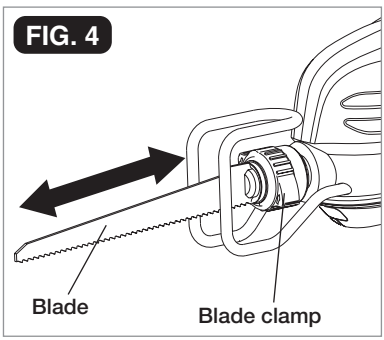
INSTALLING A SAW BLADE (FIG. 4)

1. Remove the battery pack from the saw.
2. Rotate the blade clamp counterclockwise and hold it open.
3. nsert saw blade until it is fully seated, and release the blade clamp to secure the blade in position.

REMOVING THE SAW BLADE (FIG. 4)

1. Remove the battery pack from the saw.
2. Rotate the blade clamp counterclockwise and hold it open.
3. Remove the saw blade from the blade clamp.

⚠ WARNING: The saw blade may be hot after use. Allow the blade to cool or wear gloves when removing a blade.



GENERAL CUTTING (FIG. 5A AND 5B)

⚠ WARNING: Before attaching the battery pack on the tool, always check to determine that the switch performs properly and returns to the "OFF" position when released.

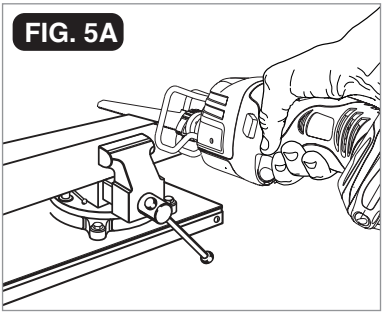
⚠ WARNING: Hold the tool only by the plastic handle and the insulated grip area to help prevent electrical shock. When sawing into walls or floors you may encounter electrical wiring. Sawing into a "live" wire will cause electric shock.

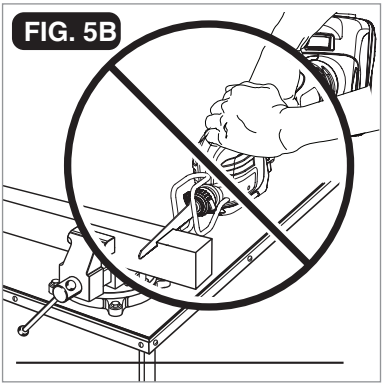
1. Make sure that the workpiece is firmly clamped.
2. Use the appropriate type and size of blade for the workpiece material and size.
3. Check for clearance behind the workpiece so that the blade will not impact another surface.
4. Mark the line of cut clearly. If cutting metal, apply cutting oil on the line.
5. Hold the saw firmly with one hand on the insulated gripping surface. Do not use two hands with this saw (Figs 5a and 5b).
6. Depress the lock-off button and trigger switch to start the saw and bring it to the maximum desired cutting speed before applying the blade to the workpiece.
7. With the shoe firmly on the workpiece, apply the blade to the workpiece and begin the cut.
8. Do not force the tool. Place the shoe firmly on the workpiece while cutting. Use only enough steady pressure on the blade to keep the saw cutting.
9. Reduce pressure as the blade comes to the end of the cut.
10. Allow the saw to come to a complete stop before removing the blade from the workpiece.
11. If sawing fiberglass, plaster, wallboard, or spackling compound, clean the saw motor vents frequently with a vacuum or compressed air. These materials are highly abrasive and may accelerate the wear on motor bearings and brushes.

OPERATION

⚠ WARNING: Do not allow familiarity with the saw to make you careless. One careless fraction of asecond is enough to inflict serious injury.

NOTICE: Cutting speeds should vary with the workpiece. Hard materials, such as metals, require lower speeds; for softer materials use higher speeds.





PLUNGE CUTTING (FIG. 6)

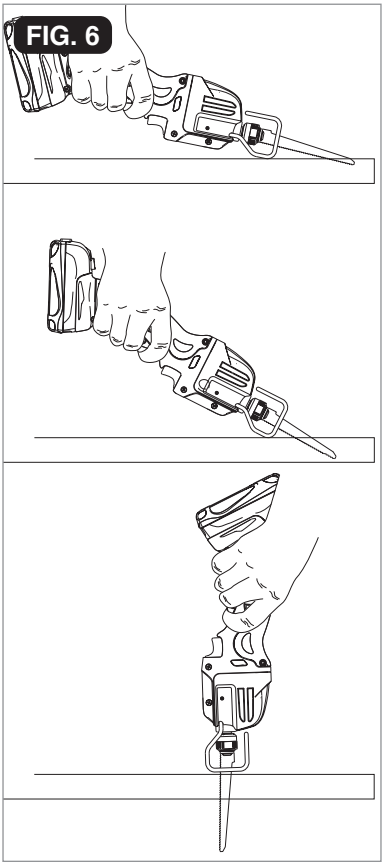
Your reciprocating saw is ideal for plunge cutting directly into surfaces that cannot be cut from an edge, such as walls or floors.

⚠ WARNING: Do not plunge cut into metal surfaces.

1. Insert the blade into the tool with the teeth facing downward, and hold the tool as shown, resting the edge of the shoe on the workpiece.
2. With the blade just above the workpiece, depress the trigger switch, and using the edge of the shoe as a pivot, lower the blade into the workpiece.
3. As the blade starts cutting, raise the handle of the tool slowly until the shoe rests firmly on the workpiece.
4. After the blade has penetrated through the workpiece, guide the saw along the marked cutting line.

⚠ WARNING: To reduce the risk of explosion, electric shock and property damage, always check the work area for hidden gas pipes, electrical wires or water pipes when making blind or plunge cut.

⚠ WARNING: To avoid loss of control and serious injury, make sure that the blade reaches maximum speed before touching it to the workpiece.



OPERATION

METAL CUTTING

The saw can be used to cut metals, such as sheet steel, pipe, steel rods, aluminum, brass, and copper. Be careful not to twist or bend the saw blade. Do not force.

The use of cutting oil is recommended when cutting soft metals and steel. Cutting oil will keep the blade cool, increase cutting action, and prolong blade life.

⚠ WARNING: Never use gasoline, because normal sparking could ignite the fumes.

1. Securely clamp the workpiece in position, and make the cut close to the clamping point in order to minimize vibration of the work being cut.
2. When cutting conduit pipe or angle iron, clamp the work in a vise, if possible, and cut close to the vise.
3. To cut thin sheet material, "sandwich" the material between pieces of hardboard or plywood, and clamp the layers together in order to reduce vibration and tearing of the material.

MAINTENANCE

GENERAL MAINTENANCE

⚠ WARNING: For your safety, always turn off switch and remove battery pack before performing any maintenance or cleaning.

The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air.

⚠ WARNING: When servicing, use only identical MASTERFORCE replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician at an Authorized Service Center.

It has been found that electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiber glass, wallboard, spackling compounds or plaster. The chips and grindings from these materials are highly abrasive to electrical tool parts, such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compound or plaster. During any use on these materials, it is extremely important that the tool is cleaned frequently by blowing with an air jet.

⚠ WARNING: Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic, which may result in serious personal injury.

Periodic maintenance allows for long life and trouble-free operation. A cleaning, and maintenance schedule should be maintained. As a common preventive maintenance practice, follow these recommended steps:

- When work has been completed, clean the tool to allow smooth functioning of the tool over time.
- Use clean damp cloths to wipe the tool.
- Check the state of all electrical cables.
- Keep the motor air openings free from oil, grease and sawdust or woodchips, and store tool in a dry place.
- Be certain that all moving parts are well lubricated, particularly after lengthy exposure to damp and/or dirty conditions.

LUBRICATION

All of the bearings in this tool are lubricated with a sufficient amount of high-grade lubricant for the life of the tool under normal operating conditions. Therefore, no further lubrication is required.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
The saw does not work	No battery pack attached	Attach a battery pack
	Battery pack is exhausted	Charge the battery pack
Blade cannot be removed	Saw dust in the slot	Clean the clamp slot with brush
Cutting is difficult.	Saw is damaged	Replace the saw

20 VOLT RECIPROCATING SAW

WARRANTY

90-DAY MONEY BACK GUARANTEE:

This MASTERFORCE® brand power tool carries our 90-DAY Money Back Guarantee. If you are not completely satisfied with your MASTERFORCE® brand power tool for any reason within ninety (90) days from the date of purchase, return the tool with your original receipt to any MENARDS® retail store, and we will provide you a refund – no questions asked.

3-YEAR LIMITED WARRANTY:

This MASTERFORCE® brand power tool carries our famous No Hassle 3-Year Limited Warranty to the original purchaser. If, during normal use, this MASTERFORCE® power tool breaks or fails due to a defect in material or workmanship within three (3) years from the date of original purchase, simply bring this tool with the original sales receipt back to your nearest MENARDS® retail store. At its discretion, MASTERFORCE® agrees to have the tool or any defective part(s) repaired or replaced with the same or similar MASTERFORCE® product or part free of charge, within the stated warranty period, when returned by the original purchaser with original sales receipt. Not withstanding the foregoing, this limited warranty does not cover any damage that has resulted from abuse or misuse of the Merchandise. This warranty: (1) excludes expendable parts including but not limited to blades, brushes, belts, bits, light bulbs, and/or batteries; (2) shall be void if this tool is used for commercial and/or rental purposes; and (3) does not cover any losses, injuries to persons/property or costs. This warranty does give you specific legal rights and you may have other rights, which vary from state to state. Be careful, tools are dangerous if improperly used or maintained. Seller's employees are not qualified to advise you on the use of this Merchandise. Any oral representation(s) made will not be binding on seller or its employees. The rights under this limited warranty are to the original purchaser of the Merchandise and may not be transferred to any subsequent owner. This limited warranty is in lieu of all warranties, expressed or implied including warranties or merchantability and fitness for a particular purpose. Seller shall not be liable for any special, incidental, or consequential damages. The sole exclusive remedy against the seller will be for the replacement of any defects as provided herein, as long as the seller is willing or able to replace this product or is willing to refund the purchase price as provided above. For insurance purposes, seller is not allowed to demonstrate any of these power tools for you.

For questions / comments, technical assistance or repair parts – Please Call Toll Free at: **1-866-917-4374**. (M-F 8am – 6pm EST)

SAVE YOUR RECEIPTS
THIS WARRANTY IS VOID WITHOUT THEM

MENARDS®

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08/2013